UNION COUNTY GOVERNMENT

ORDINANCE FOR CRYPTOCURRENCY AND DATA MINING

PROVIDING REGULATIONS FOR CRYPTOCURRENCY AND DATA MINING CRYPTOCURENCY AND DATA MINING.

Sec. 1. Purpose.

The purpose of this ordinance is to establish definitions relating to cryptocurrency and data mining and to establish standards to protect the public health, safety, and welfare and while avoiding unintended impacts on resources and adjacent uses.

By enacting this ordinance, it is the intent of Union County Government to enable the development of Cryptocurrency Mining and Data Centers, to the extent possible, in areas where any potential adverse effects on the community will be minimized.

Sec. 2. Definitions.

Code Enforcement Officer. Any person contracted with or employed by a state, county, or municipality who has enforcement authority for health, safety, or welfare requirements and is authorized to issue citations or file formal complaints regarding the same O.C.G.A. 36-74-21 (1).

Cryptocurrency. A digital currency in which encryption techniques are used to regulate the generation of units of currency and to verify the transfer of funds while operating independently of a central bank.

Cryptocurrency Data Center. Leased or owned boundaries of floor space devoted to the operating data processing equipment for Commercial Cryptocurrency Mining; excludes spaces for data centers not otherwise engaged in commercial cryptocurrency mining, commercial offices, storage, shipping and receiving, warehousing, or any other space that is not electronic processing.

Commercial Cryptocurrency Mining. The commercial process by which cryptocurrency transactions are verified and added to the public ledger, known as the block chain, and also the means through which new units of cryptocurrencies are released through the use of server farms. Any equipment requiring a High-Density Load Service, for the purposes of operating a cryptocurrency mining server farm will constitute a commercial cryptocurrency mining operation.

Cryptocurrency Server Farm. Three or more interconnected computers housed together in a single facility whose primary function is to perform cryptocurrency mining or associated data processing.

Data Mining. The commercial process by which volumes of data are analyzed to find patterns, discover trends, and gain insight into how the data can be used will constitute a commercial data mining operation.

High-density Load Service. Any individual service at or above 600 amps in which the Energy Use Intensity (EUI) is calculated as greater than 250 kWh/feet²/year in total for all operating square footage.

SOC 2. A voluntary compliance standard for service organizations, developed by the American Institute of CPAs (AICPA), which specifies how organizations should manage customer data. The standard is based on the following Trust Services Criteria: security, availability, processing integrity, confidentiality, and privacy.

Sec. 3. Applicability.

- 3.1 This ordinance shall apply to all commercial cryptocurrency mining and data mining operations installed, constructed, or modified after the effective date of this Ordinance.
- 3.2 All commercial cryptocurrency and data mining operations shall be designed, erected, and installed following all applicable Local, State, and Federal codes, regulations, and standards.

Sec. 4. Standards for Commercial Cryptocurrency Mining Operations.

- 4.1 All principal and accessory structures used for cryptocurrency mining operations, server farms, and/or data mining centers, shall be arranged, designed, and constructed to be harmonious and compatible with the site and with the surrounding properties. If prefabricated, pre-engineered or modular structures are installed, the following standards are required:
 - a. All structures shall have concrete foundations.
 - b. All exterior facades shall have muted earth tone colors, and shall not be defective, decayed, or corroded.
 - c. If intermodal shipping containers are utilized, such installation shall comply with the requirements of the most recent edition of Industrialized Building Rules and Bulletins of the Georgia Department of Community Affairs, and O.C.G.A. Title 8, Chapter 2, Article 2. Part 1.
- 4.2 The operators shall not cause, allow, or permit the operation of any source of sound which creates at an occupied residential building or defined sensitive receiver, as may exist at the time of the issuance of a certificate of completion or occupancy, a sound level that exceeds a daytime continuous sound level of 50 dBA or a nighttime continuous sound level of 45 dBA.
- 4.3 The operators shall not cause, allow, or permit the operation of any source of sound or vibration which creates a pure tone where the one-third 1/3 octave band sound pressure level in the band of interest exceeds the arithmetic average of the sound-pressure levels for the two adjacent one-third octave bands by the corresponding decibel (dB(Flat)) values as follows:
 - a. 5 dB for center frequencies of 500 Hertz and above,
 - b. 8 dB for center frequencies between and including 160 and 400 Hertz, and
 - c. 15 dB for center frequencies less than or equal to 125 Hertz.

- d. A pure tone shall be deemed present by measurement.
- 4.4 For permitting and compliance purposes, measurements shall be performed using a calibrated Type 1 Sound Level Meter, configured to log and record 1/3 octave flat-weighted equivalent sound pressure levels, and A-weighted equivalent level (Leq), slow time weighting, with a 15-minute averaging interval. Measurements shall be made proximate to, but no closer than 100 feet from any adjacent property line. Transient background sounds must be excluded from the measurement period by post-processing or other means. Compliance is indicated if the noise solely generated by the operator cannot be discriminated from the equivalent-continuous background sound pressure level, or if the noise levels solely generated by the operator otherwise conform to the requirements of Section 4.3 and Section 4.4.
- 4.5 Prior to the issuance of a certificate of completion or occupancy, a report with noise level test results shall be submitted for approval by the applicant from a noise control engineering professional for the purpose of demonstrating compliance. The expense for testing and reporting the results, in written format, to the County will be the responsibility of the applicant.
- 4.6 A noise reduction barrier or device may be required at the discretion of the County when it is conclusive that noise level tests do not conform to Sections 4.3 and 4.4. If this is required of the applicant or facility, the expense of compliance shall be the applicant's and not the County's.
- 4.7 Terminology as used herein related to acoustic levels and measurements follow American National Standard ANSI S12.9: "Quantities and Procedures for Description and Measurement of Environmental Sound Part 1: Basic Quantities and Definitions," and ANSI S12.9: "Quantities and Procedures for Description and Measurement of Environmental Sound. Part 3: Short-term measurements with an observer present".
- 4.8 The equipment used in any Commercial Cryptocurrency Mining operation shall be housed in a metered (either individually or collectively in primary-metered services), electrically grounded, and pre-engineered metal-encased structure with a fire rating designed to resist an internal electrical fire for at least 30 minutes. The containment space shall contain baffles that will automatically close in the event of fire independent of a possible electric system failure.
- 4.9 Commercial Cryptocurrency Mining Data Center will undergo SOC 2 auditing resulting in successful certification. The data center will also maintain the SOC 2 certification for the duration of operation. Validation of certification will be provided to the County within 13 months of beginning operation and annually thereafter.

- 4.10 Any use or activity producing air, dust, smoke, glare, exhaust, heat, or humidity in any form shall be carried on in such a manner that it is not perceptible at or beyond the property line.
- 4.11 Any use of ISO shipping containers or similar as housing, whether horizontally combined or independent of other structures for the commercial cryptocurrency mining operation, shall not be vertically combined to exceed a height greater than nine (9) feet.
- 4.12 Each commercial cryptocurrency mining and data mining operation shall provide a 24-hour emergency contact signage visible at the access entrance. Signs shall include company name if applicable, owner/representative name, telephone number, and corresponding local power company and telephone number.
- 4.13 All requirements of Section 4. Must be maintained after the issuance of a certificate of occupancy. Any violation of such will be handled in accordance with Section 6.

Sec 5. Application and Approval

No commercial cryptocurrency or data mining operation may be developed without site plan review and verification by the County Building & Development Department that all requirements within this ordinance are met.

Sec. 6. Violations

- 6.1 Any section of this ordinance that is not followed constitutes a violation. Each incident is a separate violation such that multiple violations may occur on the same date and subsequent dates.
- 6.2 The Code Enforcement Officer has the discretion to issue a warning or a citation on a caseby-case basis.
- 6.3 Any violation shall have a maximum punishment not to exceed a fine of \$1,000.00, imprisonment for 60 days, or both.

Sec. 7. Effectiveness, Interpretation, Separability.

- 7.1 This Ordinance shall become effective immediately upon its adoption.
- 7.2 All other portions, parts, and provisions of the County Ordinance.
- 7.3 All Ordinances, or parts of Ordinances, in conflict herewith are replaced.
- 7.4 If any part of this Ordinance conflicts with any other applicable federal, state, or local regulation, the more restrictive regulation shall control.
- 7.5 If any section, clause, portion or provision of this Ordinance is found unconstitutional, such invalidity shall not affect any other portion of this Ordinance.